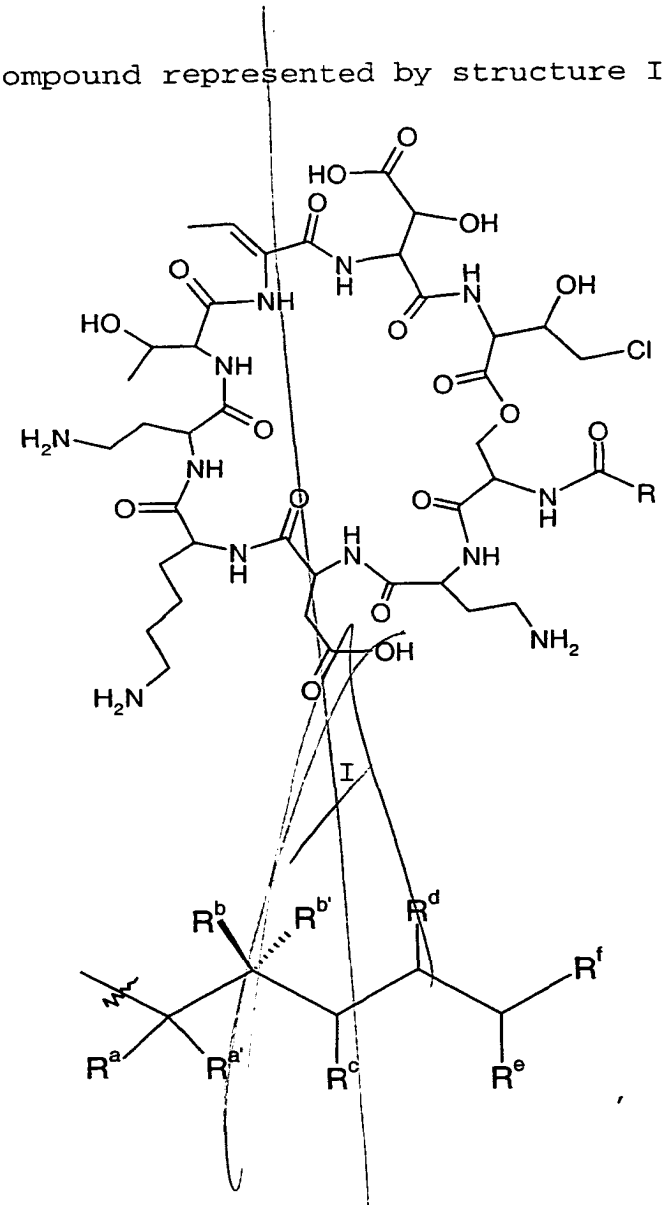
WE CLAIM:

1. A compound represented by structure I



wherein R is

where

R^a and $R^{a'}$ are independently hydrogen or methyl, or either R^a or $R^{a'}$ is alkyl amino, taken together with R^b or $R^{b'}$ forms a six-membered cycloalkyl ring, a six-membered aromatic ring or a double bond, or taken together with R^c forms a six-membered aromatic ring;

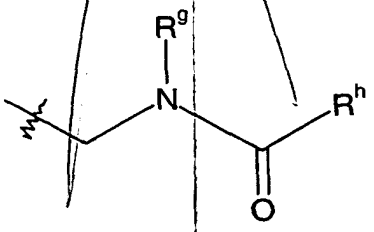
R^b and $R^{b'}$ are independently hydrogen, halogen, or methyl, or either R^b or $R^{b'}$ is amino, alkylamino, α-acetoacetate, methoxy, or hydroxy provided that $R^{b'}$ is not hydroxy when R^a, R^b, R^d, R^e are hydrogen, R^c is hydrogen and R^f is *n*-hexyl, *n*-octyl or *n*-decyl, or R^a, R^b, R^d, R^e are hydrogen, R^c is hydroxy and R^f is *n*-octyl, *n*-nonyl, or *n*-decyl;

R^c is hydrogen, hydroxy, C_1-C_4 alkoxy, hydroxyalkoxy, or taken together with R^e forms a 6-membered aromatic ring or C_5-C_6 cycloalkyl ring;

R^e is hydrogen, or taken together with R^f is a six-membered aromatic ring, C_5-C_{14} alkoxy substituted six-membered aromatic ring, or C_5-C_{14} alkyl substituted six-membered aromatic ring, and

R^f is C_8-C_{18} alkyl, C_5-C_{11} alkoxy, or biphenyl; or

R is



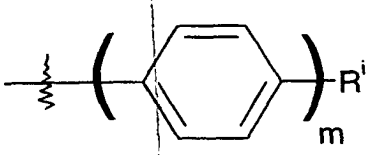
,

where

R^g is hydrogen, or C_1-C_{13} alkyl, and

R^h is C_1-C_{15} alkyl, C_4-C_{15} alkoxy, (C_1-C_{10} alkyl)phenyl, -$(CH_2)_n$-aryl, or -$(CH_2)_n$-(C_5-C_6 cycloalkyl), where n = 1-2; or

R is

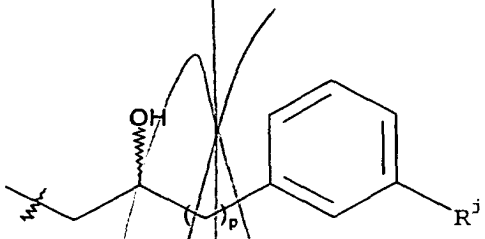


,

where

R^i is a hydrogen, halogen, or C_5-C_8 alkoxy, and m is 1, 2 or 3;

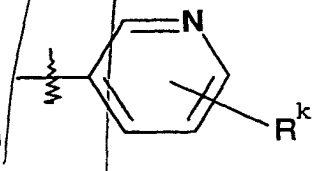
R is



where

R^j is C_5-C_{14} alkoxy or C_5-C_{14} alkyl, and p = 0, 1 or 2;

R is



where

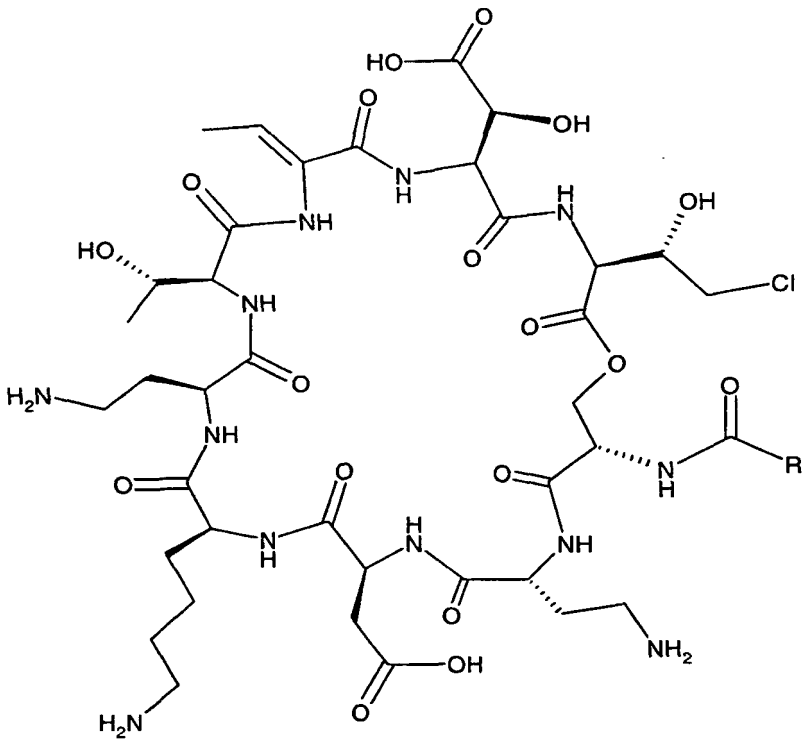
R^k is C_5-C_{14} alkoxy; or

R is -(CH_2)-NR^m-(C_{13}-C_{18} alkyl), where R^m is H, -CH_3 or

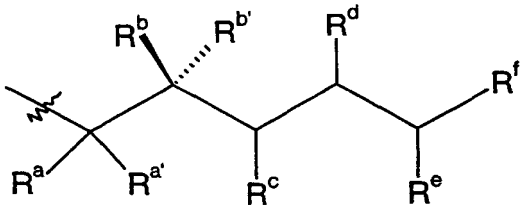
$-C(O)CH_3$; and

pharmaceutically acceptable salts and solvates thereof.

2. The compound of Claim 1 wherein structure I has the following stereochemistry



3. The compound of Claim 1 wherein R is



where

R^a and $R^{a'}$ are independently hydrogen or methyl, or either R^a or $R^{a'}$ is alkyl amino, taken together with R^b or $R^{b'}$ forms a six-membered cycloalkyl ring, a six-membered aromatic ring or a double bond, or taken together with R^c forms a six-membered aromatic ring;

R^b and $R^{b'}$ are independently hydrogen, halogen, or methyl, or either R^b or $R^{b'}$ is amino, alkylamino, α-acetoacetate, methoxy, or hydroxy provided that $R^{b'}$ is not hydroxy when R^a, R^b, R^d, R^e are hydrogen, R^c is hydrogen and R^f is *n*-hexyl, *n*-octyl or *n*-decyl, or R^a, R^b, R^d, R^e are hydrogen, R^c is hydroxy and R^f is *n*-octyl, *n*-nonyl, or *n*-decyl;

R^c is hydrogen, hydroxy, C_1-C_4 alkoxy, hydroxyalkoxy, or taken together with R^e forms a 6-membered aromatic ring or C_5-C_6 cycloalkyl ring;

R^e is hydrogen, or taken together with R^f is a six-membered aromatic ring, C_5-C_{14} alkoxy substituted six-membered aromatic ring, or C_5-C_{14} alkyl substituted six-membered aromatic ring, and

R^f is C_8-C_{18} alkyl, C_5-C_{11} alkoxy, or biphenyl.

4. The compound of Claim 3 wherein $R^{b'}$ is hydroxy provided that R^c is not hydrogen when R^a, R^b, R^d, R^e are

hydrogen and R^f is *n*-hexyl, *n*-octyl or *n*-decyl, or R^c is not hydroxy when R^f is *n*-octyl, *n*-nonyl, or *n*-decyl.

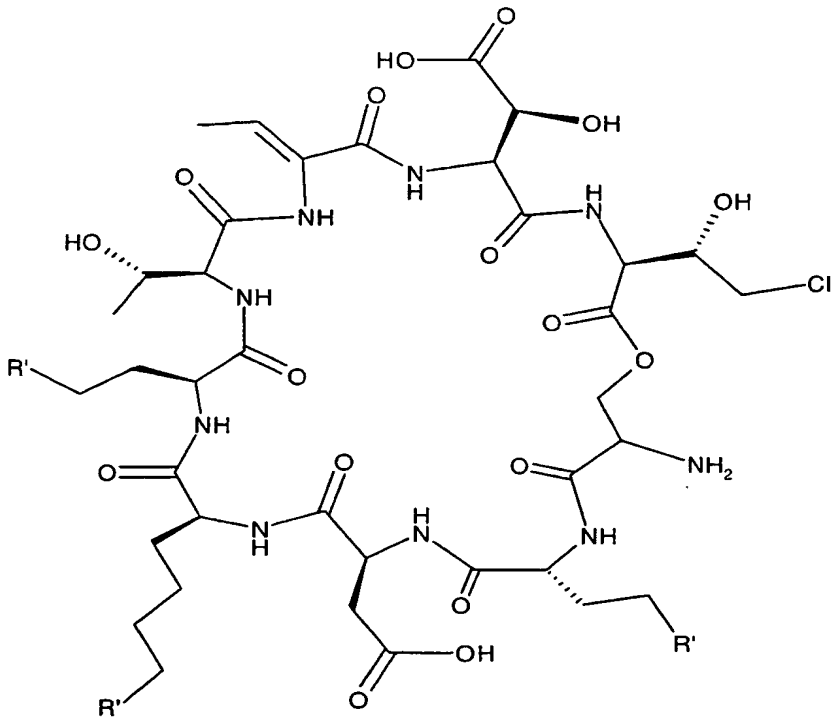
5. The use of a compound as claimed in any one of the preceding claims in the preparation of a medicament for use in combating either systemic fungal infections or fungal skin infections.

6. A pharmaceutical formulation comprising a pseudomycin compound of Claim 2 and a pharmaceutically acceptable carrier.

7. A method for treating an antifungal infection in an animal in need thereof, comprising the steps of administering to said animal a pseudomycin compound of Claim 2.

8. A process for producing a pseudomycin nucleus comprising the steps of providing a pseudomycin compound having an N-acyl alkyl side-chain containing at least one gamma or delta hydroxy group and reacting said pseudomycin compound with an acid to produce said pseudomycin nucleus.

9. The process of Claim 8 wherein said pseudomycin nucleus is represented by structure I-A



I-A

wherein R' is $-NH_2$ or -NHp-Pg where Pg is an amino protecting group and p is 0 or 1.

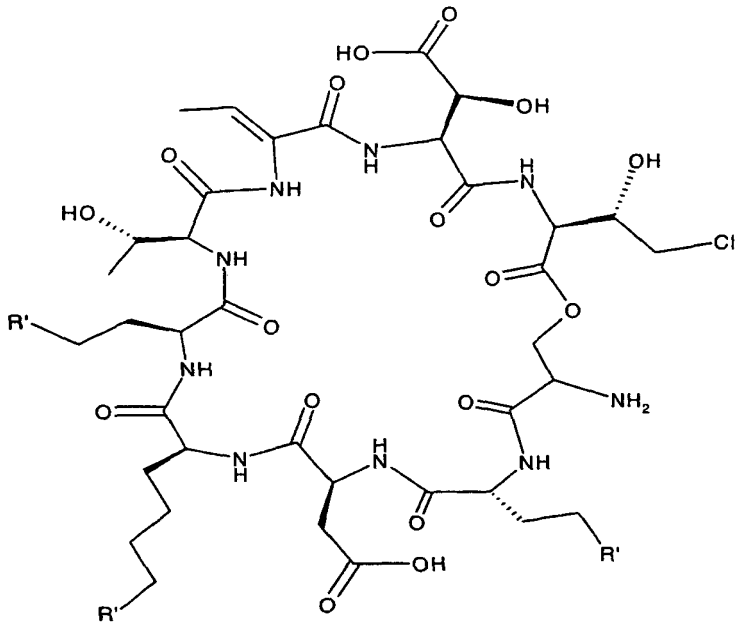
10. The process of Claim 8 wherein said pseudomycin compound having an N-acyl alkyl side-chain containing at least one gamma or delta hydroxy group is selected from the group consisting of pseudomycin A, pseudomycin A' and pseudomycin C.

11. The process of Claim 8 wherein said acid is trifluoroacetic acid or acetic acid.

12. The process of Claim 11 wherein said acid is trifluoroacetic acid.

13. A pseudomycin nucleus prepared by the process of Claim 8.

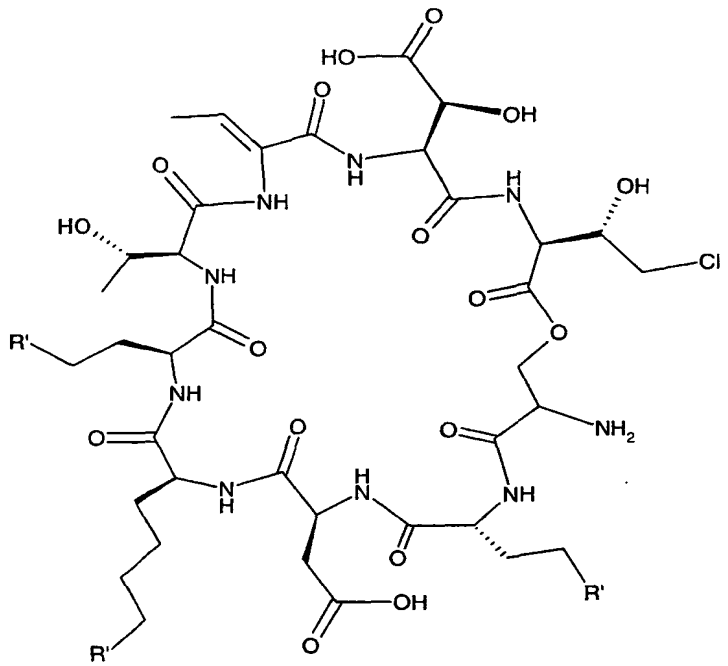
14. The pseudomycin nucleus of Claim 13 wherein said nucleus is represented by structure I-A



I-A

wherein R' is $-NH_2$ or -NHp-Pg where Pg is an amino protecting group and p is 0 or 1.

15. A pseudomycin nucleus represented by structure I-A



I-A

wherein R′ is $-NH_2$ or -NHp-Pg where Pg is an amino protecting group and p is 0 or 1.